PhD student position in Marine Sciences specializing in Evolutionary Biology

Ref PAR 2021/627


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Type of employment: Fixed-term employment, 4 years Extent: 100 % Location: Tjärnö Marine Laboratory, Department of Marine Sciences, University of Gothenburg First day of employment: as soon as possible

The Department of Marine Sciences, the Faculty of Science, University of Gothenburg, was recently launched (July 1, 2015) with the purpose to achieve the vision of "A University with marine research, teaching and cooperation of the highest international class". The department has about 110 employees - researchers, teachers, PhD students, technicians and administrators. The department carries out teaching and research in the various marine specializations, biology, oceanography, chemistry, marine geology, conservation of underwater cultural heritage, and environmental science. Research is conducted both within specialized individual projects as well as within larger interdisciplinary programs. The Department is situated in Gothenburg and at the University’s research stations at Tjärnö and Kristineberg. This position will be based at the Tjärnö Marine Laboratory, 170 km from Gothenburg (https://www.gu.se/en/tjarno).

More information on the Department can be found at www.marine.gu.se.

Project description

Sperm cells are one of the most varied cell types across the animal kingdom which is surprising giving their universal function of fertilization of an egg. Many organisms, especially crustaceans, have vastly different morphology than the tadpole-like mammalian sperm that we typically think of as a sperm cell. Additionally, in the marine environment, many organisms have external fertilization, so the gametes can be affected by the external environment (salinity, pH, pollutants). Sperm are produced in the testes through the process of spermatogenesis, and germ cells proceed through several sequential steps before becoming a functional sperm cell. Due to the complexity of varied cell types that are present in testis tissue, very little is known about the cell biology and genetics of this process except in model organisms.

There are many interesting questions still to be addressed concerning spermatogenesis and sperm evolution in fish and marine invertebrates. The PhD thesis project can be developed according to the candidate’s interests. For example, research in this area can focus on sperm morphological variation across various taxa, histology and molecular characterization of cell types during spermatogenesis and the molecular bases of sperm morphology, sperm performance or testis development in response to environmental changes, sperm-egg interactions, reproductive isolation related to gametes or other relevant topic.

Job assignments

The main task is to conduct a PhD thesis, under supervision, in the research area described above. This includes development of the PhD student’s practical experience, analytical skills, and theoretical knowledge.
As member of the project team, it is expected that the PhD student communicates and actively collaborates within the group. The PhD student will present results at conferences, seminars and project meetings. The PhD student is expected to publish their results in international peer-reviewed journals and write a final summarizing thesis in English, which is defended during a public dissertation. A Swedish Ph.D. thesis should be completed within 4 years full-time work including course work (60 ECTS), e.g. pedagogic and other soft-skill courses as well as courses to develop technical skills and knowledge related to the PhD topic (please see below).

Qualification/merits
The applicant must hold a Master's degree or equivalent in biology, genetics, molecular biology, cell biology or related field, and a strong interest in evolutionary biology. The candidate should have good knowledge and practical experience of fieldwork, laboratory work and good computational/statistical skills. Other skills relevant to the project are beneficial (depending on the project direction), such as experience with histology, microscopy, DNA/RNA/protein laboratory methods. Previous research experience is an added merit, for example, conference attendance, grant funding and scientific publications.

The applicant should possess the ability to work independently and take responsibility for his/her own learning and research, as well as to collaborate as part of the research team.

Excellent oral and written communication skills in English are necessary as communication within the group will be in English and the overall working environment is international.

In addition to the formal qualification requirements, great emphasis will be placed on personal qualities and suitability for the position.

Eligibility
The qualifications for education on a doctoral level are: degree in advanced level, at least 240 university points, of which 60 are on an advanced level, or in another way acquired similar knowledge. Upon appointment, the ability to successfully complete the PhD program must first be evaluated. Only applicants who are admitted to the PhD program at the Dep. of Marine Sciences may be hired.

Third cycle education
Admission to third cycle education is aiming at a PhD in Natural Science, specializing in Marine Sciences. The education runs for four years of fulltime studies, containing three years of thesis work and one year of academic education (i.e. course work and literature studies). A selection of courses at the Department/Faculty is available, but national/international courses can also be selected. You will be employed at University of Gothenburg, and salary follows the regulations at University of Gothenburg. In addition to pursuing his/her own research studies, PhD students may be required to perform other duties, such as teaching, research and administrative work according to special regulations.

Assessment
Regulations for the evaluation of qualifications for education on a doctoral level are given in SFS 1998:80. The main assessment is a judgement for the applicant to successfully complete the PhD education.

Appointment Procedure
Please apply online.

The following should be included:

- A cover letter in English describing the applicant’s motivation for the position (why you are interested in this position, how does this fit with your career plans) and how the applicant meets the selection criteria (suitability for the proposed work). Max. two A4 pages.
- An attested list of qualifications (CV)
- Examination certificates and transcript of courses with grades.
- Relevant publications, including accepted academic papers or research thesis. For publications, please indicate your role in the work (1-2 sentences per publication).
- Contact information (phone, email) of two personal references
The highest ranked applicants will be contacted for interview.

The University of Gothenburg promotes equal opportunities, equality and diversity.

Applications will be destroyed or returned (upon request) two years after the decision of employment has become final. Applications from the employed and from those who appeal the decision will not be returned.

For further questions, to express an interest, or discuss potential project ideas before applying, please contact Erica Leder (erica.leder@gu.se), Senior Lecturer, Dept of Marine Sciences.

Labour union
Information on union representatives can be found here

Closing date: 28 May 2021

Till bemannings- och rekryteringsföretag och till dig som är försäljare: Göteborgs universitet anlitar upphandlad annonssbyrå i samband med rekrytering av personal. Vi undanber oss vänligen men bestämt direkttkontakt med bemannings- och rekryteringsföretag samt försäljare av jobbannonser.

Apply